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To: Mitch Cron/R3/USEPA/US@EPA
cc: aeffiong@state.pa.us, Kathy Davies/R3/USEPA/US@EPA, Walter Graham/R3/USEPA/US@EPA
Subject: Re: Draft subslab sampling analytical data, Bally site

I have looked at the unvalidated subslab data you sent me. Here are some preliminary risk conclusions:

We have no inhalation risk factors by which to evalute cis-12DCE, so I have made no conclusions about that chemical.

Vinyl chloride was not detected. The detection limits at SV-1 and SV-2 were adequate, but the detection limits at SV-3 and SV-4 were elevated and exceeded the concentrations that would be of interest. This however, was due to the high concentrations of TCE at these locations.

TCE is the chemical of greatest concern in these samples. A worker exposed to the maximum concentration (13000 ug/m3 at SV-3) would need an 85-fold dilution for the noncancer hazard to reach an acceptable level. The dilution needed to reach an acceptable cancer risk ranges from at least 60-fold (using EPA's least conservative draft slope factor, and a 1E-4 cancer risk) to 120000-fold (using EPA's most conservative draft slope factor, and a 1E-6 cancer risk). The lowest reported TCE concentration, 130 ug/m3 at SV-1, would require a zero- to 1000-fold dilution to reach an acceptable cancer risk for a worker. (The necessary dilution factors would be even higher for residents.) I do not know whether these areas are currently used as frequently-occupied workplaces, or what the actual dilution factor is from subslab to indoor air.

For the other chemicals, 11DCE would require a 2-fold dilution to reach an acceptable Hazard Index for residents. All other chemicals would be at acceptable concentrations even if undiluted.